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## Furulent Metritis Complicated by Furulent Encephalitis in a Heifer

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condition. Three weeks later she was returned with a history of having two severe chewing fits at home within the past 18 hours. She showed an extremely nervous and anxious expression in her eyes, was very sensitive to digital palpation over the tempora, had an elevated temperature, and proceeded to have more fits in the hospital. With these clinical symptoms and the history a severe meningitis was diagnosed.

We were fortunate enough at the time to have an ampule of penicillin powder and it was decided to attempt its use as a last-resort measure. It was dissolved in triple-distilled water to the strength of 5,000 units per cc.

The initial dose was injected intrathecally in the atlanto-occipital articulation. Ten cc. of the spinal fluid were removed and replaced with 10 cc. of the prepared solution diluted to contain 10,000 units. Therapy was maintained over a 36-hour period with intramuscular injections of 1 cc. (5,000 units) every three hours.

#### Recovery

Supportive symptomatic treatment was included and a rapid, uneventful recovery followed. The fits ceased, the elevated temperature lowered, and she was apparently normal in five days. However, she was maintained under constant observation for a week to insure against a possible recurrence, being sent home exactly 12 days after the case was presented.

This was a very thrilling and spectacular recovery, but it must be pointed out that this is just one case using a relatively new therapeutic agent, so further study and observation of its use is to be recommended.

*M. H. McMillan, D.V.M., '44*

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### Furulent Metritis Complicated by Furulent Encephalitis in a Heifer.

A 2-year-old Shorthorn heifer was admitted to the clinic July 10, 1944. She had shown a loss of appetite for a week previously, and, in addition, dyspnea, edema of the conjunctiva, and a slight cloudiness of the cornea. A clinical examination re-

vealed a labored respiration (70 per minute), a pulse rate of 80, and a temperature of 104°F. Erythema and edema of the conjunctiva of the right eye was present; both eyes were discharging a mucopurulent exudate. A mucopurulent exudate was apparent at the nostrils. Further examination disclosed a pharyngitis. The inability to swallow was apparent from the profuse flow of saliva from the mouth. The edematous and erythematous vulva gave a mucopurulent discharge. The cow strained for short periods of time, passing liquid feces.

#### Abortion

On the fourth day in the clinic, a fetus 25 cm. long was aborted. Most of the fetal membranes were retained. A differential blood count was made which demonstrated a great increase in lymphocytes.

Three days later the animal became much weaker and was destroyed. Post-mortem examination revealed a pyometritis which explained the discharge and the inflamed condition of the vagina and the vulva. The uterine infection had metastasized to the lungs and cranial cavity. Numerous pulmonary abscesses less than 1 cm. in diameter and containing a brownish pus were found. Considerable necrosis surrounded these lesions. A cranial abscess was located outside the dura in the sphenoid area of the brain. It was responsible for some of the previously mentioned symptoms. This abscess was a collection of brownish pus with considerable necrosis inside a heavy capsule.

Differentiation of the types of central nervous disorders is difficult as the symptoms are dependent upon the portion of the brain affected and the extent to which it is affected. Thus, the same disease can cause many different symptoms, and many diseases can cause the same symptoms. This is especially true in differentiating between the suppurative encephalitis mentioned above, sporadic bovine encephalitis, and malignant catarrhal fever.

Purulent encephalitis of a week duration would usually have little, if any, elevation in temperature. The lymphocyte count would be greatly increased due to the chronic nature of the primary cause

of the abscess. Symptoms of pyometritis, such as the muco-purulent exudate from the vagina and abortion of the fetus, would also suggest the possibility of a metastatic abscess in the brain.

Sporadic bovine encephalitis can be diagnosed by the sudden high rise in temperature, severe depression, loss of appetite and emaciation. In most cases of this disease reported, there is a swelling of one or more feet, often just below the tarsal or carpal joints. There would not be a great increase in lymphocytes as in a purulent encephalitis because the chronic primary cause would be absent. In addition there would be no involvement of the intestine or mucous membranes in the head. There would be no severe uncontrollable diarrhea or classical head catarrh as is found in malignant catarrhal fever.

W. J. Einerson, '45

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**Coronitis.** On August 14, 1944, a 6-year-old female draft horse entered the Stange Memorial Clinic with a history of having had a deformed coronary band of each front foot for about a year and having been slightly lame for two months.

Examination revealed that there was an irregular thickening of the toe wall extending from the coronary band down about half the length of the wall. This thickened area extended approximately three-fourths inch above the normal wall surface. The coronary band above the roughened area was separated from the wall, and the lesion contained much pus. Maggots were present in the lesion on the right foot.

#### No Exostosis

There was no indication of exostosis of the extensor process of the third phalanx as seen in pyramidal disease (buttress foot). Neither was there any indication of founder or puncture wounds in the sole. It was therefore reasoned that, since both front feet were affected and in a similar manner, the horse was so handled or stabled that she probably periodically injured her hoofs at the coronary bands

and that when they finally became infected and she showed lameness the owner was prompted to present her for treatment.

#### Fly Larvae

The maggots were removed by applying a piece of cotton saturated with chloroform to the lesion. A phenol-formalin (phenol 2 drams, formalin 3 drams, water sufficient to make 1 gal.) pack was applied to the lesions and was renewed at 48-hour intervals for 8 days. At this time satisfactory healing of the lesions and almost complete lack of lameness was evidenced so the treatment was discontinued. Fly repellent (oil of tar 2 oz., oil of eucalyptus 1 oz., and castor oil 13 oz.) was sprayed on the lesions to keep the flies away. By this time the infection had been arrested, and normal healing was in progress to the extent that simple home nursing would give a complete recovery. A slight permanent thickening of the coronary region would probably result. The patient was then discharged.

Fly repellent was dispensed to the owner to spray on the lesions, and he was advised to keep the mare in a clean place where she could not further damage the feet by pawing until the coronary lesions healed.

The point of special interest in this case was the similarity of the lesions on the two front feet considering that the condition was neither functional nor congenital.

—D. V. Benson, '45

#### Not Guilty

The Associated Serum Producers, fourteen member companies and company officials, were acquitted of alleged conspiracy to restrict sales of hog cholera serum and virus, on the first ballot February 16 in the Federal Court for the Northern District of Illinois.

The case had been on trial before a jury in the court of Judge Wm. H. Holly for nearly two weeks. The government had alleged a conspiracy in violation of the Sherman Act, to restrict sales of anti-hog